

Europäisches Patentamt

European Patent Office

Office européen des br vets



(1) Publication number:

0 590 690 A3

12)

EUROPEAN PATENT APPLICATION

2) Application number: 93116250.7

(5) Int. Cl.5: A47L 9/04

2 Date of filing: 18.04.89

Priority: 20.04.88 JP 95578/88 20.04.88 JP 97792/88

Date of publication of application:
 06.04.94 Bulletin 94/14

- Publication number of the earlier application to accordance with Art.76 EPC: 0 338 513
- Designated Contracting States:
 DE GB
- Date of deferred publication of the search report:
 18.05.94 Bulletin 94/20
- Applicant: HITACHI, LTD. 6, Kanda Surugadal 4-chome Chiyoda-ku, Tokyo 101(JP)

② Inventor: Watanabe, Syuji 564-7 Funaishikawa,

Toukai-mura
Naka-gun, Ibaraki 319-11(JP)
Inventor: Satoh, Susumu

2029-5 Shimotezuna,

Takahagi-shi Ibaraki 318(JP)

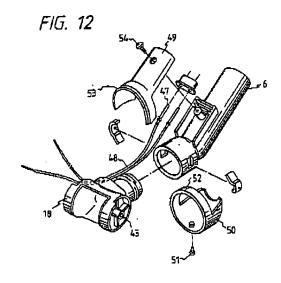
Inventor: Sagawa, Koichi

31-3, Morlyama-cho 2-chome,

Hitachi-shi

Ibaraki 316(JP)

- Pepresentative: Patentanwälte Beetz Timpe Siegfried Schmitt-Fumian Mayr Steinsdorfstrasse 10 D-80538 München (DE)
- Suction nozzle with rotary brush for vacuum cleaner.
- A suction nozzle for a vacuum cleaner is described that comprises a rotary brush (3), an electric motor (2) for driving the brush, and a turnable bent coupling (6) for connecting the suction nozzle to an extension pipe (46) of a vacuum cleaner, wherein a power supply wiring (48) is led from the vacuum cleaner main body to the electric motor (2) along a hose (45), the extension pipe (46) and the turnable bent coupling (6), a protection cover (49, 50) which is disposed outside the turnable bent coupling (6) and defines a space with said turnable bent coupling (6) in which space the electric power supply wiring is arranged stackly so as to move freely up and down, right and left relatively to said turnable bent coupling.





EUROPEAN SEARCH REPORT

Application Number EP 93 11 6250

	DOCUMENTS CONSID	ERED TO BE RELEVAN	Relevant	CLASSIFICATION OF THE
Carchola	Citation of document with ind	ication, where appropriate,	to claim	AFFLICATION (InLCL4)
X	GB-A-2 002 864 (VORW * page 1, line 80 -	ERK &CO) line 99; figures 1-4 *	1	A47L9/04
A	FR-A-2 364 016 (VORW * page 2, line 22 -	ERK & CO.) line 27; figure 2 *	1	
••				
				TECHNICAL FELDS SEARCHED (InLC).4)
	ł.			A47L
_	A hour down on for all phines		-	
<u></u>	The present pearch report has been drawn up for all chainst			Frank
X:F	Piecelleses	25 February 199	14 Н	enningsen, O
X = 1 Y = 1	CATEGORY OF CITED DOCUMENTS T: theory or print E: earlier parent and culturity relevant if taken alone anticularly relevant if combined with abords D: document cite to comment of the same category L: document cite		dpic poderlying document, but g g date ed in the applica	lien
A : 1	echnological background non-written disclosure ntermediate document	å : member of th document	e same patent fo	unily, corresponding